



Pacific Southwest Biological Services, Inc.

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Snipes Dye Associates
8348 Center Drive, Suite G
La Mesa, CA 92042-2910

4 December 2015
PSBS #W337

Re: Winter Gardens Apartments Western Fire Management Zone and Sustainably-landscaped Area

Dear Mr. Snipes,

This correspondence addresses rehabilitation of the western area of the Winter Gardens Apartment site to remove the fire hazard by reducing the bulk of flammable fuels and replacing it with lower fuel volume and lower flammability plant materials. The preference is for self-sustaining plants and those adapted to the site conditions. Another issue is that they would not present a potential for escape and invasion elsewhere in the region.

The proposal involves selective removal of all *Arundo* and Canary Island Palms and retention of *Eucalyptus* trees that are healthy and have no immediate potential for windfall breakage. The creation of open areas would permit planting of site-adapted, low flammability plant materials.

Existing Conditions

The western portion of the proposed project site, as well as the adjacent western and southern areas, is dominated by a mixture of non-native vegetation. These are described, quantified and detailed below:

Non-native (*Eucalyptus*) Riparian Woodland (#65000) (0.21 acre)

This vegetation community is primarily comprised of a mix of *Eucalyptus* (*Eucalyptus* sp.) and Giant Cane (*Arundo*) *Arundo donax*. The central feature of the channel has a higher extent of *Eucalyptus*; however, mixed within are *Arundo* and Canary Island Date Palms (*Phoenix canariensis*), with a few minor riparian elements, such as Arroyo Willow (*Salix lasiolepis*; consisting of about 5 trees scattered along the center of the dense growth). Downstream the eclectic habitat has been removed by the neighbors but occurs upstream and onto the lands to the west to a limited extent.

Arundo-dominated Riparian Woodland (#65100) (0.72 acre)

The margins of the channel have a higher density of *Arundo*. The eastern margin of the channel and more extensively the western margin (which continues off-site) is a congested growth of *Arundo* and Canary Island Date Palms. The ash scars on the palm trees indicate that this habitat is highly susceptible to fire, particularly the palm trees. Downstream the habitat has been removed by the neighbors but occurs upstream and onto the adjacent lands to the west.

Interpretation of Vegetative Conditions

Impacts to Non-native (*Eucalyptus*) Riparian Woodland and Arundo-dominated Riparian Woodland occur if it is interpreted in a riparian context. The analysis of the vegetation and site

condition by myself, as the project consultant, and by County staff has determined that the riparian system on-site does not meet County guidelines for such a habitat and that it is a non-native riparian woodland that needs to be modified for fire hazard reduction. The planting of the sustainably-landscaped area, once cleared of most non-native vegetation, would be with native shrubs and trees appropriate to the hydric and soil conditions on the site.

Proposed Actions:

1. The modification of the Fire Management Zone will be done prior to any site grading that might preclude ready access by mechanical equipment to the activity site. Ultimately, access will be by way of a foot path wide enough to allow for non-motorized equipment, i.e., wheel barrows, carts.
2. Mechanically remove Canary Island Date Palm accumulated leaf debris.
Removal of accumulated palm leaf debris must precede activity in the area due to the dangerous conditions posed by the basal spines on the downed leaves. The mulching of palm material is problematic due to the fibrous nature of the plant material so the decision to mulch or export to a land fill is left up to the landscape contractor.
3. Select and prune up Eucalyptus trees for retention and remove remaining trees.
An experienced tree maintenance person will inspect the trees to be retained for branch safety, and vigor and will prune the trees and retain the debris on-site for subsequent mulching. The pruning will be done to remove lower branches that would constitute a potential for fire laddering into the retained canopy.
4. Select and prune up Willow trees for retention.
An experienced tree maintenance person will inspect the trees to be retained for branch safety, and vigor and will prune the trees and retain the debris on-site for subsequent mulching. The pruning will be done to remove lower branches that would constitute a potential for fuel laddering into the retained canopy.
5. Mechanically remove Arundo canes and rhizomes.
Canes will be removed initially to allow access to rhizome mats. Removal of rhizomes will be done mechanically using a small tractor capable of undercutting the rhizome mats and lifting them out of the site. The Arundo material will be not be mulched, as discussed below, due to the potential to regenerate vegetatively.
6. Mechanically remove Canary Island Date Palms.
Removal of large trunks of the trees will have to be done carefully if any preserved Eucalyptus or Willow trees are within the fall zone of the palm trunk. Removal of palm leaves from the fallen trunk would reduce hazards from the spines.
7. Mulch non-Arundo organic matter on site for use as mulch layer in level portions of site.
Palm tree debris may or may not be mulched based upon the decision of the landscape contractor.

8. Once the site has been cleared of selected, non-native material, the ground will be in a disturbed condition and will need to be lightly re-contoured to allow for container planting and mulching.
9. Mulching will be done prior to container stock planting so that the irrigation system can be installed on top of the mulch, since the installation is not anticipated to be for more than three years. The depth of mulch should be in the realm of 3 to 5 inches deep.
10. Container plant materials will be placed according to the hydro zone planting scheme and are detailed as follows with as local a provenance as is possible:

<u>Common Name</u>	<u>Botanical Name</u>	<u>Planting Zone</u>
Mexican Elderberry	<i>Sambucus mexicana</i>	A
Mesquite	<i>Prosopis juliflora</i>	A
False Indigo Bush	<i>Amorpha fruticosa</i>	A
Yerba Mansa	<i>Anemopsis californica</i>	A
Honeysuckle	<i>Lonicera subspicata</i>	C
Deergrass	<i>Muhlenbergia rigens</i>	B
Spike Sedge	<i>Eleocharis acicularis</i>	A
Spiny Rush	<i>Juncus acutus</i>	A
Wild Ryegrass	<i>Leymus triticoides</i>	C
Povertyweed	<i>Iva hayesiana</i>	B
Saltbush	<i>Atriplex canescens</i>	C
Goldenbush	<i>Isocoma menziesii vernonoides</i>	C
Wild Gourd	<i>Cucurbita foetidissima</i>	C
California Rose	<i>Rosa californica</i>	B
Climbing Bush Penstemon	<i>Keckiella cordifolia</i>	C
California Desert Thorn	<i>Lycium californicum</i>	C

11. Hydroseeding of exposed soil slopes on the eastern portion of area with the following seed mixture with as local a provenance as is possible:

<u>Common Name</u>	<u>Botanical Name</u>
Deerweed	<i>Lotus scoparius (Acmospion glabra)</i>
Arroyo Lupine	<i>Lupinus succulentus</i>
Chia	<i>Salvia columbariae</i>
Beard-tongue	<i>Penstemon spectabilis</i>
Mint-leaf Vervain	<i>Verbena menthaefolia</i>
San Diego Sunflower	<i>Bahiopsis laciniata</i>

12. Irrigation will be done by temporary, at grade surface spray irrigation, manually activated to control application of moisture to the different plant preferences in the three hydro zones and hydro-seeded slopes.
13. Depending upon the season of the fuel reduction activities and supplemental hydroseeding and planting, the maintenance activity will involve weekly visits during the first 3 months following planting to activate the irrigation system and inspect for growth of undesirable plant materials on the mulched area or hydroseeded slope. Following the

3 month period, monthly visits to activate or not active the irrigation will be made. These visits will also be used to remove any invasive plant materials. It is estimated that two years will be required to assure establishment of the plant materials, with replanting of failed stock starting after the first 6 month following installation. During the maximal 3 years for establishment, no access will be permitted to the site by other than maintenance staff. Following that period, the decision will be made by site management concerning access.

14. An ongoing obligation of the landscaping of the entire development site will be monthly inspections by qualified landscaping staff to remove debris and invasive plant materials from the site.
15. Interaction with adjacent property owners with similar, non-native, fire hazard vegetation will be made by letter, indicating the measures being taken to remove the fire hazard and attractive nuisance aspect from the subject property and the need for similar activity on their lands for the benefit of the community.

These steps should be incorporated into the project landscape plans with notes from this document as appropriate.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Mitchel Beauchamp". The signature is fluid and cursive, with the first name "R." and last name "Beauchamp" clearly legible.

R. Mitchel Beauchamp, M. Sc.